

NLRP5 Antibody (C-term) Blocking peptide Synthetic peptide

Catalog # BP13418b

Specification

NLRP5 Antibody (C-term) Blocking peptide - Product Information

Primary Accession

<u>P59047</u>

NLRP5 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 126206

Other Names NACHT, LRR and PYD domains-containing protein 5, Mater protein homolog, NLRP5, MATER, NALP5

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13418b was selected from the C-term region of NLRP5. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

NLRP5 Antibody (C-term) Blocking peptide - Protein Information

Name NLRP5

Synonyms MATER {ECO:0000303|PubMed:19542546}, NAL

Function

As a member of the subcortical maternal complex (SCMC), plays an essential role for zygotes to progress beyond the first embryonic cell divisions via regulation of actin dynamics (By similarity). Required for the formation of F-actin cytoplasmic lattices (CPL) in oocytes, which in turn are responsible for symmetric division of zygotes via the regulation of mitotic spindle formation and positioning (By similarity). Required for the localization of cortical granules to the cortex of oocytes, via association with the cortical actin scaffold (By similarity). Required for cortical actin clearance prior to oocyte exocytosis (By similarity). Involved in regulating post-fertilization Ca(2+) release and endoplasmic reticulum (ER) storage via regulation of ER localization (By similarity). May be involved in the localization of mitochondria to the cytoplasm and perinuclear region in oocytes and early stage embryos, independent of its role in CPL formation (By similarity).



Cellular Location

Cytoplasmic vesicle, secretory vesicle, Cortical granule. Mitochondrion. Nucleus, nucleolus. Cytoplasm. Golgi apparatus

Tissue Location

Expressed in cumulus cells (at protein level) (PubMed:19542546). Highly abundant in oocytes and early embryos, however poorly expressed in somatic tissues such as the liver and spinal cord (PubMed:11925379, PubMed:30877238)

NLRP5 Antibody (C-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

Blocking Peptides

NLRP5 Antibody (C-term) Blocking peptide - Images

NLRP5 Antibody (C-term) Blocking peptide - Background

The protein encoded by this gene belongs to the NALPprotein family. Members of the NALP protein family typicallycontain a NACHT domain, a NACHT-associated domain (NAD), aC-terminal leucine-rich repeat (LRR) region, and an N-terminalpyrin domain (PYD). Expression of this gene is restricted to theoocyte. A mouse gene that encodes a maternal oocyte protein, similar to this encoded protein, is required for normal earlyembryogenesis.

NLRP5 Antibody (C-term) Blocking peptide - References

Cummings, J.R., et al. Tissue Antigens (2010) In press :Rose, J. Phd, et al. Mol. Med. (2010) In press :Maraldi, T., et al. Mol. Hum. Reprod. 15(8):499-506(2009)Sena, P., et al. Reprod. Biomed. Online 18(2):226-234(2009)Enjuanes, A., et al. Cancer Res. 68(24):10178-10186(2008)